

Descriptions of New Melanic Forms (Lepidoptera: Geometridae, Noctuidae and Arctiidae).

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During the past three or four years of collecting numerous melanic forms of various species of moths have been caught, and since some of them have proved to be new, it seems fitting at this time to describe them. I believe that I am justified in doing so on three counts: the moths are very distinct in coloration, melanism is an inheritable characteristic, and numerous people before me have described similar forms of other species—some thinking they represented good species and others realizing that they were merely forms.

GEOMETRIDAE.

VENUSIA COMPTARIA form. nov. **palumbes**.

The fore and hind wings a uniform dark pearly gray, crossed by a blackish median line, all other lines obsolete, a few white streaks on the veins, especially the cubital and anal veins. Thorax and abdomen darker than the wings.

Holytype: ♀, Ithaca, NEW YORK, May 8, 1936 (J. G. Franclemont), [in Coll. Franclemont].

The uniformity in color will serve to distinguish this dark form from the normal form which is very pale and contrastily marked.

PHIGALIA TITEA form. nov. **deplorans**.

The fore and hind wings a uniform powdery black, the fore wings with the post-medial, median and antemedial lines faintly discernible, the subterminal line white but quite faint; the hind wings with a very faint postmedial line, not evident in some specimens. The thorax concolorous with the wings; abdomen darker contrasting with the wings and thorax.

Holytype: ♂, Ithaca, NEW YORK, April 26, 1935 (J. G. Franclemont), [in Coll. Franclemont]. *Paratypes*: 3 ♂ ♂, Ithaca, N. Y., April 27, 1935, May 1, 1937, March 22, 1938, (J. G. Franclemont), [in Coll. Franclemont].

This form may be readily distinguished from the typical form by its powdery black coloring and almost obsolete lines, the coloring of the normal form being pale whitish gray with very conspicuous black lines.

VITRINELLA PAMPINARIA form. nov. *stygia*.

The fore and hind wings deep grayish black, the ante- and postmedial lines black, but not conspicuous, a dark median shade on the fore wings, both fore and hind wings with a white subterminal line. The thorax and abdomen concolorous with the wings.

Holotype: ♂, Ithaca, NEW YORK, Aug. 13, 1937 (J. G. Franclemont), [in Coll. Franclemont].

This form differs from the normal form in its almost uniform black color, that of the normal being gray.

NOCTUIDAE.

CATOCALA CEROGAMA form. nov. *ruperti*.

Head black with the bases of the antennae white; thorax black with the collar and tegulae edged with white, the posterior tuft white, the legs with the femora, tibiae and tarsi black on their outer side and white on their inner side. Fore wings shining black with a slight brownish cast in some lights, the subterminal line white, the most conspicuous feature of the fore wings, the postmedial line evident, of intenser black, edged on the outer side by a pale shade, antemedial line indistinct, subreniform pale contrasting with the ground color, reniform very faintly indicated, the fringe black. Hind wings black, paler at base, crossed by a single median yellow band, somewhat reduced compared with that of normal *cerogama*, especially the last third which tends to become obsolete in some specimens, the fringe white. Underside of fore wings black crossed by cream colored postmedial and antemedial bands, underside of hind wings black with the median band and base cream colored tinted with yellow.

Holotype: ♂, Ithaca, NEW YORK, Aug. 20, 1937 (J. G. Franclemont), [in Coll. Franclemont]. *Allotype*: ♀, Ithaca, N. Y., Aug. 16, 1937 (J. G. Franclemont), [in Coll. Franclemont]. *Paratypes*: 16 ♂, 21 ♀, Ithaca, N. Y., July 4 to Sept. 12, 1935 to 1937, (J. G. Franclemont, H. I. Scudder), [in Coll. Franclemont, Lemmer, Rupert and Cornell Univ.]. 4 ♂, 1 ♀; Sardinia, N. Y., Aug. 18 to 30, 1937 (L. R. Rupert), [in Coll. Rupert].

This very conspicuous form can be readily separated from the normal form of *cerogama* by its totally black forewings and by the usual reduction of the yellow band of the hind wings.

I consider this form the showiest *Catocala* we have about

Ithaca, and I look on its gradual increase from year to year with interest. I take great pleasure in naming this form for my friend, Mr. Laurence R. Rupert, who shared with me the pleasure of catching the first specimens.

CATOCALA MESKEI form. nov. **krombeini**.

Head black, bases of the antennae white; thorax black dusted with white, tegulae whitish in central portion, appearing as if margined with black; abdomen grayish brown with a blackish cast. Fore wings powdery black, the margin pale with the veins black in this area, subterminal line white, very conspicuous the postmedial line traceable towards the costal margin, other lines obsolete, the subreniform pale connecting with a whitish patch before the reniform which is barely evident, fringe pale; hindwings as in normal *meskei*. Underside of fore wings black, base pale, and antemedial triangular patch of white and a postmedial band of white narrowing toward inner margin; underside of hindwings flushed with red, a black medium band and a broad black marginal band, fringe white.

Holotype: ♀, Ithaca, NEW YORK, July 23, 1937 (J. G. Franclemont), [in Coll. Franclemont]. *Allotype*: ♂, Ithaca, N. Y., Aug. 5, 1937 (J. G. Franclemont), [in Coll. Franclemont.] *Paratypes*: All Ithaca, N. Y., 1 ♀, July 19, 1937, 1 ♀, July 23, 1937, 1 ♀, July 31, 1937 (J. G. Franclemont), [all in Coll. Franclemont].

Typical *C. meskei* is not considered a common species and it was a surprise to find it at Ithaca this past summer, but more of a surprise was the melanic form. At first I thought it might be nothing more than aberrant *C. briseis*. It differs from typical *meskei* in the black fore wings and may be distinguished from *briseis* by the narrower and more pointed fore wings and the lack of the buff shade between the white subterminal line and the black postmedial line.

This form is named for my friend Mr. Karl V. Krombein, the companion on many collecting excursions.

CATOCALA PARTA form. nov. **forbesi**.

Head and palpi black, bases of the antennae white; thorax brownish gray with the collar and tegulae edged with black; abdomen brownish black. Fore wings intense black with a few brownish shades, subterminal line white, postmedial line intenser black, made evident by a pale shade on its outer side, white at inner margin, antemedial line blackish buff, white at

inner margin, subreniform pale with a black center, reniform traceable, fringe pale; hind wings as in normal *parta*, fringe white; underside of forewings black, with the base white and the two cross bands white; underside of hind wings flushed with red, crossed by a median black band and a wide, black, marginal band.

Holotype: ♀, Sardinia, NEW YORK, Aug. 7, 1934 (J. G. Franclemont), [in Coll. Franclemont]. *Allotype*: ♂, Sardinia, N. Y., Aug. 28, 1937 (L. R. Rupert), [in Coll. Franclemont]. *Paratypes*: Sardinia, N. Y., 1 ♂, July 30, 1934, 1 ♀, Aug. 27, 1937 (L. R. Rupert), [in Coll. Rupert].

This very striking form may be distinguished from the normal form of *parta*, which is soft gray with a few brownish tints, by the almost uniform black coloring of the forewing; the black transverse streak running from the upper angle of the fore wing to the base, so conspicuous in normal *parta*, is completely obscured by the black ground color in this form.

I take pleasure in naming this form for Dr. W. T. M. Forbes, who has done much to "aid and abet" my interest in the Lepidoptera.

CATOCALA NEOGAMA form. nov. **mildredae**.

Head whitish gray, bases of the antennae black, thorax whitish gray, collar and tegulae edged with black, posterior tuft white; abdomen brownish black. Fore wings shining black with bluish or greenish reflections in some lights, brownish shades before the intense black postmedial line, antemedial line intense black becoming white at inner margin, subreniform pale, reniform warm brown, fringe dark; hind wings predominately black, the remaining yellow confined to two spots in the middle of the wings, one on the inner side and the other on the outer side of the median black band; the amount of yellow on the hind wings no doubt will vary with the individual specimens as it does in *cerogama*; fringe buff. Underside of fore wings black, yellow at base and crossed by antemedial and postmedial yellow bands; underside of hind wings black, base yellow and crossed by a yellow median band.

Holotype: ♀, Ithaca, NEW YORK, Aug. 25, 1937 (J. G. Franclemont), [in Coll. Franclemont].

This very handsome moth is a great contrast to the somber colored normal form of *neogama*; its black forewing with the glowing reflections of green and blue will serve to differentiate

it immediately from the normal form with its gray forewings. The amount of black on the hind wings, as noted in the above description, will probably vary from specimen to specimen.

I am pleased to name this beautiful form for my Mother.

ACRONICTA VINNULA form. nov. **percolens**.

Forewings deep olive green, black lines and dashes as in normal *vinnula*, the black postmedial line followed by a series of white lunules, a conspicuous feature of the wing; hind wings blackish gray. Thorax concolorous with the wings, collar and tegulae tipped with white; abdomen smoky gray.

Holotype: ♂, Ithaca, NEW YORK, July 5, 1937 (J. G. Franclemont), [in Coll. Franclemont]. *Allotype*: ♀ Ithaca, N. Y., June 7, 1936 (J. G. Franclemont), [in Coll. Franclemont]. *Paratypes*: All Ithaca, N. Y., 1 ♂, June 2, 1933, 1 ♂, Aug. 5, 1937, 3 ♀, June 7, and Aug. 18, 1937 (J. G. Franclemont), [in Coll. Franclemont].

This pretty little form may be easily recognized by its intense olive color in comparison with the pale whitish gray color of the normal form.

ACRONICTA FRAGILIS form. nov. **atrior**.

Fore wings intense black with a white postmedial line, most noticeable in the females, the males tend to have almost uniform black forewings; hind wings dusky with a darker border. Thorax black; abdomen smoky gray with the basal tuft black.

Holotype: ♂, Ithaca, NEW YORK, May 25, 1936 (J. G. Franclemont), [in Coll. Franclemont]. *Allotype*: ♀, Ithaca, N. Y., June 3, 1936 (J. G. Franclemont), [in Coll. Franclemont]. *Paratypes*: All Ithaca, N. Y. 1936, 1 ♂ 1 ♀, June 9, 1 ♂, June 12, (J. G. Franclemont), [in Coll. Franclemont].

The intense black forewings of this form distinguish it from the normal gray form of the species. This black form is much commoner than the normal form at Ithaca.

ACRONICTA SUPERANS form. nov. **superba**.

Fore wings blackish gray, with deep black shades and ordinary lines visible, the two whitish areas so conspicuous in normal *superans* reduced to dusky blackish shaded areas; hind wings blackish gray, paler at bases. Thorax yellowish gray dusted with black, collar edged with black, tegulae black with a few whitish flecks.

Holotype: ♂, Ithaca, N. Y., May 18, 1936 (J. G. Franclemont), [in Coll. Franclemont]. *Allotype*: ♀, Sardinia, N. Y., June 20, 1934 (J. G. Franclemont), [in Coll. Franclemont].

This form has the forewings almost uniform in darkness of color in contrast to the variegated fore wings of the normal form.

ACRONICTA MORULA form. nov. *columboides*.

Fore wings a deep smoky gray, soft and somewhat olive in hue, with brownish shades, the ordinary lines and dashes as in normal *morula*, an indication of a subterminal row of pale dots and the postmedial line followed by a series of pale lunules; hind wings blackish gray. Thorax concolorous with fore wings, central portion brown; abdomen smoky gray.

Holotype: ♂, Chaffee, NEW YORK, May 14, 1934 [Bred], (J. G. Franclemont), [in Coll. Franclemont]. *Allotype*: ♀, Ithaca, N. Y., July 19, 1937 (J. G. Franclemont), [in Coll. Franclemont]. *Paratypes*: all New York, Crystal Lake, Cattaraugus County, 1 ♂, July 19, 1932; Sardinia, 1 ♂, June 20, 1934; Chaffee, 1 ♂, June 23, 1934; Ithaca, ♂, June 3, 1936, 3 ♂, 3 ♀, July 7, to 22, 1937, (J. G. Franclemont), [all in Coll. Franclemont].

This form will be readily recognized by its dark coloring as compared with the pale whitish gray coloring of the normal form.

ACRONICTA DISTANS form. nov. *scintillans*.

Fore wings shining gray black with a slight tendency to appear powdery, a series of subterminal whitish spots, ordinary lines and spots present of intenser black than the ground color; hind wings blackish gray, paler at base, females with hind wings all black. Thorax black contrasting somewhat, but not noticeably with the fore wings; abdomen dark luteous black.

Holotype: ♂, Crystal Lake, Cattaraugus County, New YORK, Aug. 2, 1933 (J. G. Franclemont), [in Coll. Franclemont] *Allotype*: ♀, Chaffee, N. Y., Aug. 3, 1934 (J. G. Franclemont), [in Coll. Franclemont] *Paratypes*: Chaffee, N. Y., 2 ♂, July 17, and 31, 1934; Crystal Lake, Catt. Co., N. Y., 1 ♀, July 28, 1933; Ithaca, N. Y., 1 ♂, May 12, 1936, 1 ♀, July 22 and 1 ♂, Aug 5, 1937 (J. G. Franclemont), [in Coll. Franclemont].

The deep shining black color of the fore wings will readily aid in distinguishing this form from the normal gray form. It is not as common as the dark form of *impleta*, but appears to be more widely distributed.

ARCTIIDAE.

HAPLOA CONFUSA form. nov. *suffusca*.

Forewings with the ground color dark fuscous, the ordinary markings of the species not contrasting to any great degree with the ground color, but nevertheless evident because of the relatively darker color; hind wings pale fuscous, lighter at base; thorax fuscous, tegulate white; abdomen dusky with a dark dorsal stripe.

Holotype: ♂, Allegany State Park, NEW YORK, July 16, 1936 (E. Greenspan), [in Coll. Franclemont].

The deep fuscous color of the fore wings will immediately separate this form from the normal form which has the ground color of the primaries white; the lack of strong contrast between ground color and markings is also a distinguishing characteristic when compared with the normal form which has the black markings in sharp contrast with the white ground color.

A South African Onthophagus Found in United States (Coleoptera: Scarabaeidae)*

Specimens of an unusual *Onthophagus* collected by Professor P. W. Fattig near Vidalia and Lyons, Georgia, have been determined as *Onthophagus depressus* Har., a South African species, by Dr. G. J. Arrow of the British Museum. Dr. Arrow, in commenting upon the species states that the same species has been described from Australia under the name *Onthophagus carteri* by Blackburn. Professor Fattig first collected the species at light at Vidalia, Georgia, May 4, 1937. A few more were found August 11 and on August 30, 1937 about three hundred specimens were taken in cow dung at two localities,—three miles southwest of Vidalia and two and one-half miles west of Lyons. These localities are about seventy-five miles inland west of Savannah, Georgia. How and when this African species was introduced into the United States is unknown at present.

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